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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/559,611

**Applicant(s)**

OSSBAHR, GILBERT

**Examiner**

NAHID AMIRI

**Art Unit**

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 5/27/2009 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/07/2009 has been entered. The application is not in condition for allowance in view of the new grounds of rejection set forth below. Claims 4 and 7 are canceled. Claims 1-3, 5, 6, and 8-14 are pending.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “an outer surface parallel to said inner surface” and “be bearable against the flat outer surface of said first or second pair of fixing plates;”, claim 12, lines 5-6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 10, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, line 2, it is unclear what Applicant meant by having “beams are module m or a multiple thereof”.

Claim 10, line 1, it is unclear if “a beam” is one of the plurality of beams of claim 8, or is a different beam; further, line 2, it is not clear which beams Applicant is referring as “composite plurality of beams” are these beams different from a plurality of beams of claim 8; finally, what “cross section dimension” Applicant referring to as “m or a multiple thereof”. Same applies to claim 14, lines 1-2.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 11, lines 1-2, the limitation of “the cross sectional dimensions of all beams are module m or multiple thereof”. Further, claim 12, the limitation of the system comprising a third beam of rectangular cross section having a pair of fixing plates mounted on opposite sides of said third beam and fixable along said third beam by friction maintained by tightening bolts, each one of the fixing plates comprising an inner surface adapted to face said third beam, which is adapted

to face away from said third beam, and be bearable against the flat outer surface of said first or second pair of fixing plates” are consider as new matter.

***Claim Objections***

Claim 9 is objected to because of the following informalities: Claim 9, line 2, “module” should be changed to --modules--.. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

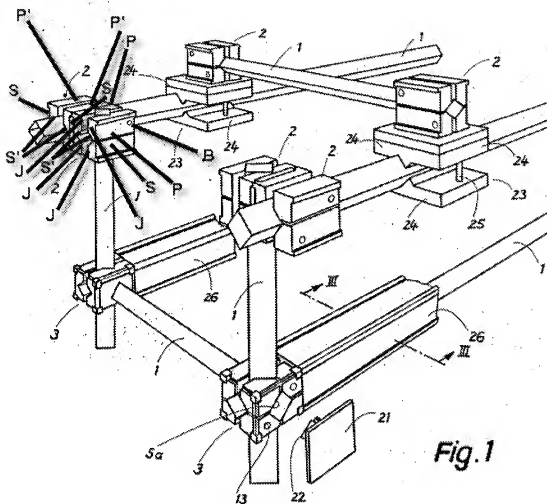
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3, 8-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent DE 3736266 A1 Neff et al.**

With respect to claim 1, Neff et al. disclose a system (Fig. 1) for detachable joining of at least first and second beams (1) of rectangular cross-section comprising for each said first beam (1) to be joined, a first pair of fixing plates (P) mountable on opposite sides of a said first beam (1) and fixable along said first beam by friction maintained by tightening bolts (B), each one of the fixing plates (P) comprising an inner planar surface (S') adapted to face said first beam (1), and an outer planar surface (S), which in adapted to face away from said first beam (1), for said second beam (1) to be joined, a second pair of fixing plates (P') mountable on opposite sides of said second beam (1) and fixable along said second beam by friction maintained by tightening bolts, each one of the fixing plates (P') comprising an inner planar surface (S') adapted to face said second beam (1), and an outer planar surface (S), which is adapted to face away from said second beam (1), the outer planar surface of said first pair of fixing plates (P) being bearable against the outer planar surface of said second pair of fixing plates (P') when said first and second beams (1) are arranged to be joined in perpendicular or parallel directions, the relative

positions of said first and second pairs of fixing plates (P, P') being fixed by locking elements (constituted by nuts not shown) in recesses in said outer surfaces of the said first and second fixing plates (P, P') said locking elements also anchoring the tightening bolts (B).

Neff fails to disclose the inner planar surfaces of the first and second pair of fixing plates are parallel to the outer planar surfaces of the first and second pair of the fixing plates. There is no criticality is associated with the inner and outer planar surfaces being parallel to one another, since one would know to use this type of system for square, rectangular and/or any other shape beam. Therefore, it would have been an obvious matter of design choice to have the two inner and outer planar surfaces of the fixing plates of Neff being parallel to one another fence since such choice appears to be no more preference which they are known.



**Fig. 1**

With respect to claim 3, Neff et al. disclose (Fig. 1) that the each fixing plate (P, P') comprises projections (J) arranged at each corners of the fixing plate (P, P').

With respect to claim 8, Neff et al. disclose a detachable beam joint system (Fig. 1) comprising a plurality of beams (1) of rectangular cross section, each beam (1) having at least one pair of fixing plates (P) mounted on opposite sides of the respective beam (1) and fixable along the respective beam by friction maintained by tightening bolts (B), each one of the fixing plates (P) comprising an inner surface (S') facing the respective beam (1), and an outer surface

(S) to said inner surface (S') and which faces away from the respective beam (1), the outer surfaces of each pair of fixing plates (P) being bearable against one of the outer surfaces (S) of another pair of fixing plates (P') mounted on opposite sides of another beam (1) when respective beams (1) are arranged to be joined in perpendicular or parallel direction, whereby every surface of every beam (1) is either parallel or orthogonal to every other surface, the relative positions of said pairs of fixing plates (P) being fixed by locking elements (constituted by nuts not shown) in recesses in the outer surfaces of the respective fixing plates, said locking elements also anchoring the tightening bolts (B); and wherein the cross sectional dimensions of all beams (1) are module or a multiple thereof.

Neff fails to disclose the inner planar surfaces of the first and second pair of fixing plates are parallel to the outer planar surfaces of the first and second pair of the fixing plates. There is no criticality is associated with the inner and outer planar surfaces being parallel to one another, since one would know to use this type of system for square, rectangular and/or any other shape beam. Therefore, it would have been an obvious matter of design choice to have the two inner and outer planar surfaces of the fixing plates of Neff being parallel to one another fence since such choice appears to be no more preference which they are known.

With respect to claims 9, 10 and 14, Neff discloses (Fig. 1) that the cross sectional dimensions of all beams (1) are modules; and a beam is comprised of a composite plurality of beams of cross sectional dimension a multiple thereof as much as Applicant's invention is.

With respect to claim 11, Neff discloses (Fig. 1) that each of said first beam (1) and said second beam (1) has an additional pair of fixing plates (P') mountable on opposite sides of said beam (1) and fixable along said beam (1) by friction maintained by tightening bolts (B), each one of the fixing plates (P') comprising an inner surface adapted to face said beam (1).

Neff fails to disclose the inner planar surfaces of the first and second pair of fixing plates are parallel to the outer planar surfaces of the first and second pair of the fixing plates. There is no criticality is associated with the inner and outer planar surfaces being parallel to one another, since one would know to use this type of system for square, rectangular and/or any other shape beam. Therefore, it would have been an obvious matter of design choice to have the two inner



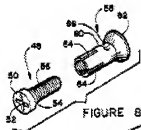
and outer planar surfaces of the fixing plates of Neff being parallel to one another fence since such choice appears to be no more preference which they are known.

With respect to claim 13, Neff discloses (Fig. 1) that the additional beams (1) of rectangular cross section.

**Claims 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neff et al. as applied to claims 1, 3, 8-11, 13 and 14 above, and further in view of US Patent No. 5,873,564 Bisch.**

With respect to claims 2 and 6, Neff et al. fail to disclose that the locking elements are made of inner threaded sleeves; and wherein the sleeves have longitudinal slots.

Bisch teaches a system (Fig. 8) including a tightening member is bolt (48); and a locking element (58) having a threaded sleeve (60) with a longitudinal slot (64); the bolt and threaded sleeve provide for a rigid, secure connection between two members. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the system of Moss et al. with a bolt and threaded sleeve with a longitudinal slot as taught by Bisch in order to provide a more rigid, secure connection between two members.



With respect to claim 5, Neff et al. fail to disclose the provision of wedges, extending from the projections that are arranged to fix the position of the beams in a transverse direction in the friction joint to achieve a shape determined locking of the beams. The use of wedges is notoriously well known in the art per se to take up play between two members and provide a secure/tight connection between the two members and Official Notice of this is taken. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the projections of Neff et al. to provide them with wedges in order

to take up any play between two plate members and ensure a tight fit even when receiving a beam with smaller cross-section.

***Allowable Subject Matter***

Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

- The prior art does not disclose that “an outer surface parallel to said inner surface” and “be bearable against the flat outer surface of said first or second pair of fixing plates”, as recited in claim 12, lines 6-8.
- The prior art does not provide any teaching, suggestion or motivation to modify the prior art as such.
- The pair of fixing plates of the third beam produces critical unexpected results such that the limitation is not mere common sense or mere design choice.
- There is no cogent reasoning that is unequivocally independent of hindsight that would have led one of ordinary skill in the art at the time the invention was made to modify the prior art to obtain the applicant's invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

***Response to Arguments***

Applicant's arguments filed 5/07/09 have been fully considered but they are not persuasive.

Applicant provides general remarks alleging that claims 1-3, 5, 6, and 8-14 are now patentable because the present invention specifically refers to “fixing plates” having an inner planar surface which is parallel to its outer planar surface which enable beams of rectangular

cross section will be joined flat on and not tilted up on edge as shown in Neff et al. Further, Applicant argues that the Neff et al construction appears to attempt to exploit the increased bending moment available by putting the beams on edge. Therefore, it is impossible to join together smaller and larger beams of rectangular cross section in many different combinations using a limited number of fixing plate and to arrange all of the beam surfaces are either parallel or orthogonal to every other surface. Finally, it is indicated that depending claims 2, 3, 5, 6 and 9-14 are patentable as a result of their direct dependency to claims 1 and 8. This is not persuasive.

As stated in the above rejection Neff et al. teach the inner and outer planar surfaces. Further, as Applicant indicated in his argument there is some advantage of which Neff has exploited to increase bending moment. If this is so, why does the Applicant not exploit the advantage the way that Neff et al. does by orienting its inner surface in different angle. Furthermore, there is no criticality is associated with the inner and outer planar surfaces being parallel to one another, since one would know to use this type of system for square, rectangular and/or any other shape beam. Finally, there is no patentability distinct between Neff and Applicant's present invention since the inner surface of both Neff and Applicant's inventions merely correspond to the outer surface of the beam. Therefore, it would have been an obvious matter of design choice to have the two inner and outer planar surfaces of the fixing plates of Neff being parallel to one another fence since such choice appears to be no more preference which they are known.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on Monday through Thursday from 8:00-6:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nahid Amiri  
Examiner  
Art Unit 3679  
August 4, 2009

/Michael P. Ferguson/  
Primary Examiner, Art Unit 3679